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EXAMINER	
TORRES, MARCOS L	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/085,910	AURANEN ET AL.	
	Examiner	Art Unit	
	MARCOS L. TORRES	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2008*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-23,31-42,44,46 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-23,31-42,44,46 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Regarding applicant's representative [hereinafter applicant] arguments directed to the112 1st rejection, in order to overcome the 112 rejection the applicant must show the support [expressly, implicitly or inherently] from the specification, however in the response submitted by the applicant with reference to the specification, the section only disclose a multiprotocol encapsulator and fails to disclose or describe a unidirectional protocol.

2. Regarding applicant's arguments that Jonsson and Chen should not be combined because in Jonsson the handover is performed at the mobile service center; as previously stated in the prior office action Jonsson discloses in col. 9, lines 1-8, that the handover does not necessarily needs to be done by mobile service center and may be done by mobile station. Also it does not means a duplication of computing resources, note that Jonsson disclose a division of labor not a duplication of labor (see col. 9, lines 1-8). Since Jonssons already suggest the division of labor, it is perfectly combinable with Chen.

3. As to applicants arguments directed to bidirectional protocol vs. unidirectional protocol; first, applicant fails to define a unidirectional protocol [for example TDMA system uses beacon in one direction which may be equated to unidirectional protocol, however since the claim or the specification define the term the broadest reasonable interpretation is given]. Second, it is within the knowledge of one of the ordinary skills in

the art substitute one protocol with another protocol since it would bring the same expected result. Third, note that a bidirectional protocol already have all the functionality of the unidirectional protocol, no significant change is required as suggested by the applicant a bidirectional system just need not to respond.

4. The rest of the arguments, they fall for the same reasons as shown above.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner was unable of finding support for the new limitation "via a uni-directional protocol".

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 6-8, 21, 23, 31, 33-38, 41-42 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson (U.S. Patent 5,513,246) in view of Chen US 6731936 B2 and further in view of Malek US 5822313A and further in view of Upton 5784695.

As to claim 1, Jonsson discloses a method comprising: receiving at a mobile terminal a first signal broadcast by a first wireless transmitter at a frequency (see col. 7,

lines 20-48); when said first signal meets a first predefined criterion (see col. 10, lines 3-10), deriving signal data from a second signal broadcast by a second wireless transmitter (see col. 10, lines 11-15); and determining that said signal data from said second wireless transmitter meets a second predefined criterion, switching reception from said first wireless transmitter to said second wireless transmitter (see col. 10, line 3 - col. 11, line 45) and switching reception to said second wireless transmitter (see fig. 1e). Jonsson does not specifically disclose that the broadcast data is video or that the handoff is between burst. In an analogous art, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the mobile terminal that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and switching reception to said second wireless transmitter (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). Although it is clear that transmission burst [slot, frame] in a TDMA system are part of a series of periodic burst [slot, frame], the prior references does not disclose this obvious detail. In an

analogous art, Malek discloses wherein transmission burst or slot in a TDMA system are part of a series of periodic burst [slot, frame] which are repeated in intervals (see col. 2, lines 8-15). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to use periodic burst for the simple purpose of comply with the TDMA system for compatibility with already existing protocols. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claims 6, Jonsson discloses a method wherein said first criterion is met if a receiver signal strength value for said first signal measured by the mobile terminal is

less than a predetermined value (see col. 9, lines 9-20; col. 10, lines 3-55). Jonsson does not specifically disclose that the broadcast data is video. In an analogous art, Chen discloses wherein the broadcast data is video (see col. 6, lines 61-64), thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Jonsson method for maintaining the data quality in a mobile multimedia device.

As to claims 7-8, Jonsson discloses a method wherein said first and second is met by been greater or smaller than a predetermined value (see col. 10, lines 3-55). Jonsson does not specifically disclose criterion is a bit error rate. Chen discloses were the criterions is a bit error rate and deriving it from the signal (see col. 8, line 10-13).

As to claim 33, Jonsson discloses a apparatus comprising: a digital broadcast receiver that receives digital broadcasting information for receiving information from a plurality of synchronized digital broadcasting wireless transmitters (see col. 2, lines 32-38), said digital broadcast receiver configured to receive at least a first portion of the information as a first transmission burst, said first transmission burst broadcast by a first digital broadcasting wireless transmitter (see col. 7, lines 20-48); a processor coupled to the digital broadcast receiver (see col. 7, lines 54-57), switch reception by the digital broadcast receiver from the first digital broadcasting wireless transmitter to a second digital video broadcasting wireless transmitter (see col. 10, line 3 - col. 11, line 45). Jonsson does not specifically disclose the type of data and second digital video broadcasting wireless transmitters. In an analogous art, Chen discloses wherein the

broadcast data is video (see col. 6, lines 61-64) and transmit a synchronized information by a common service provider (see col. 6, lines 65 - col. 7, line 50), and going a handover by the synchronized first and second digital video broadcasting wireless transmitters (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Jonsson method for maintaining the data quality in a mobile multimedia device. Jonsson and Chen do not specifically disclose the buffer configured to store said first transmission burst. In an another analogous art, Malek discloses a buffer configured to store said first transmission burst; a mobile station executing a handover after reception of said first transmission burst has been completed and before a consecutive transmission burst is sent by the synchronized first and second digital broadcasting wireless transmitters (see col. 6, lines 31-35; col. 3, lines 56 67; col. 4, lines 10-14). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Jonsson method for maintaining the data quality in a mobile multimedia device. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts

[packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claims 34-35, Jonsson discloses a method/system wherein said first and second is met by been greater or smaller than a predetermined value (see col. 10, lines 3-55). Chen discloses were the criterion is a bit error rate and deriving it from the signal (see col. 8, lines 10-14).

As to claim 31, Jonsson discloses a system comprising: a first digital broadcasting transmitter configured to broadcast information as a first plurality of consecutive transmission bursts (see col. 7, lines 20-48; col. 9, lines 45-53); a second digital video broadcasting transmitter configured to broadcast the information as a second plurality of consecutive transmission bursts in synchronization with the first plurality of consecutive transmission bursts (see col. 10, lines 11-15; col. 5, lines 40-49), and a receiver system configured to receive said information (see col. 5, line 56 – col. 6, line 1), said receiver further including a processor, and executable instructions executed by the processor (see col. 6, lines 15-24; 52-59 col. 8, lines 18-25), cause the processor to perform a hand-over from said first digital broadcasting transmitter to said second

digital broadcasting transmitter upon receipt of a first transmission burst, if at least one predefined criterion has been met (see col. 10, line 3 - col. 11, line 45). Jonsson does not specifically disclose the video data, receiver system including a buffer configured to buffer said transmission bursts or handover prior to a consecutive transmission burst. In an analogous art, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the apparatus that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and going a handover (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). In an analogous art, Malek discloses a buffer configured to store said first transmission burst; a mobile station executing a handover after reception of said first transmission burst has been completed and before a consecutive transmission burst is sent by the synchronized first and second digital broadcasting wireless transmitters (see col. 6, lines 31-35; col. 3, lines 56 67; col. 4, lines 10-14). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine both

teachings for enhanced management of system resources. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claim 41, Malek discloses wherein the pluralities of transmitters are synchronized which is not disclose by the primary reference (see col. 2, lines 49-53).

As to claim 42, Malek discloses method wherein said step of selecting said second wireless transmitter for receiving the information is performed after receipt of a signal transmission burst from said first wireless transmitter, and prior to receipt of a consecutive signal transmission burst from said second wireless transmitter which is not disclose by the primary reference (see col. 6, lines 31-35).

As to claim 21, Jonsson discloses a method comprising: a mobile terminal for receiving a series of signals provided by each of plurality of wireless transmitters (see col. 9, lines 45-53), selecting a first wireless transmitter from a plurality of wireless transmitters for providing information (see col. 9, lines 1-20), each said wireless transmitter broadcasting; receiving signals broadcast by the first wireless transmitter (see col. 7, lines 20-48); configured to derive a first quality rate for information received from said first wireless transmitter; when said first quality rate for said first wireless transmitter is greater than a predefined quality value, deriving a second quality rate for a second synchronized wireless transmitter; and when said second quality rate is less than said quality value, selecting said second synchronized wireless transmitter for providing the information (see col. 10, line 3 - col. 11, line 45) and switching reception directly to said second wireless transmitter (see fig. 1e). Jonsson does not specifically disclose synchronized wireless transmitter, that the quality rate is a bit error rate or the BTS on different frequencies or video broadcast. In an analogous art, Chen discloses a mobile station selecting transmitters (see col. 8, lines 54-57; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5); the criterion is a bit error rate and deriving it from the signal (see col. 8, lines 10-13, 28-32). Aditionally, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the mobile terminal that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from

a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and going a handover by the synchronized first and second digital video broadcasting wireless transmitters (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). In an analogous art, Malek discloses using different frequencies for different base station which is not shown by the previous references (see col. 1, lines 58-63), thereby minimizing co-channel interference. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine this teaching with the Jonsson system for an even quality of communication. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would

be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claim 36, Jonsson discloses a comprising the steps of: receiving signals broadcast synchronously by the first and second wireless transmitters (see col. 2, lines 32-38; col. 5, line 45-49), selecting the first wireless transmitter for receiving information broadcast in consecutive transmission bursts, (see col. 9, lines 1-20), each said synchronized wireless transmitter broadcasting; receiving signals broadcast by the first wireless transmitter (see col. 7, lines 20-48); deriving a first quality rate for information received from said first wireless transmitter; if said first quality rate for said first wireless transmitter is greater than a predefined quality value, deriving a second quality rate for a second wireless transmitter; and if said second quality rate is less than said quality value, selecting said second wireless transmitter for providing the information (see col. 10, line 3 - col. 11, line 45) and switching reception directly to said second wireless transmitter (see fig. 1e). Jonsson does not specifically disclose that the quality rate is a bit error rate or the BTS on different frequencies or that the data is video. However, Jonsson discloses that he is using TDMA a system that uses synchronized wireless transmitter. In an analogous art, Chen discloses a mobile station selecting transmitters (see col. 8, lines 54-57; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5) and were the criterion is a bit error rate and deriving it from the signal (see col. 8, lines 10-13, 28-

32), thereby permitting a soft handover. Also aditionally, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the mobile terminal that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and doing a handover by the synchronized first and second digital video broadcasting wireless transmitters (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). In an analogous art, Malek discloses using different frequencies for different base station which is not shown by the previous references (see col. 1, lines 58-63), thereby minimizing co-channel interference. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine this teaching with the Jonsson system for an even quality of communication. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton

discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claims 23 and 38, Jonsson discloses a method wherein said first criterion is met if a receiver signal strength value for said first signal measured by the mobile terminal is less than a predetermined value (see col. 9, lines 9-20; col. 10, lines 3-55).

As to claim 37, Malek discloses method wherein said step of selecting said second wireless transmitter for receiving the information is performed after receipt of a signal transmission burst from said first wireless transmitter, and prior to receipt of a consecutive signal transmission burst from said second wireless transmitter which is not disclosed by the primary reference (see col. 6, lines 31-35).

As to claim 46, Jonsson discloses a method wherein the series of periodic bursts are included in a time-sliced digital signal (see col. 5, lines 45-49). Jonsson does not specifically disclose wherein the data is video broadcasting. In an analogous art, Chen

disclose a method wherein the series of periodic bursts are included in a time-sliced digital video broadcasting signal and wherein the first digital video broadcasting signal comprises a first time-slice of the time-sliced digital video broadcasting signal (see col. 6, lines 61-64; col. 1, lines 31-55). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to broadcast other data such as video as suggested by Chen in col. 4, lines 21-41.

10. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson (U.S. Patent 5,513,246) in view of Chen US 6731936 B2 and Malek and Upton as applied to claim 1 above, and further in view of Ahopelto (U.S. Patent 5,970,059).

As to claim 3, Jonsson discloses everything claimed as explained above except for the step of stripping encapsulation from said first signal after receipt by the mobile station or the broadcast data is video. Ahopelto discloses the step of stripping encapsulation from said first signal after receipt by the mobile station (see col. 9, lines 28-30). In an analogous art, Chen discloses wherein the broadcast data is video (see col. 6, lines 61-64), thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching for the simple purpose of using the data.

11. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson (U.S. Patent 5,513,246) in view of Chen US 6731936 B2 and Malek and Upton as applied to claim 1 above, and further in view of OFFICIAL NOTICE.

As to claim 4, OFFICIAL NOTICE IS TAKEN THAT the use of several synchronized transmitters is a common and well-known technique used in several

wireless communication standards such as GSM and TDMA. Also, the EN 301192 is a common and well-known standard. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use such standards in the Jonsson modified system for the simple reason of compatibility.

As to claim 5, Jonsson discloses a method further comprising the step of sending said first signal to an application processor for conversion (see col. 5, line 40 - col. 8, line 24), to a data packet (see col. 6, lines 13-28). In an analogous art, Chen discloses wherein the broadcast data is video (see col. 6, lines 61-64), thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine this teaching for improved network bandwidth management.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen and Malek and Upton as applied to claim 21 above, and further in view of Taketsugu (U.S. Patent US005420863A).

As to claim 22, Jonsson discloses everything claimed as explained above except for selecting a wireless transmitter between transmissions burst. In an analogous art, Taketsugu discloses selecting a wireless transmitter between transmissions burst (see col. 6, lines 41-56), thereby allowing a smooth transition between transmitters without loosing or having to retransmit data. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine both teachings for enhanced management of system resources.

13. Claims 9-14, 16, 18-20 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen and further in view of Makinen (U.S. Patent 5,764,700) and further in view of Upton.

As to claims 9 and 12-14, Jonsson discloses an apparatus/system comprising: a digital broadcast receiver configured to receive digital broadcasting information from a plurality of wireless transmitters, wherein the digital broadcasting receiver is configured to receive at least a first portion of the information as a first transmission burst, said first transmission burst broadcast by a first wireless transmitter; and an election module configured to switch reception from the first wireless transmitter to a second wireless transmitter (see col. 5, line 40 - col. 11, line 42) and switching reception directly to said second wireless transmitter (see fig. 1e). Jonsson does not specifically disclose that the receiver is a digital video broadcasting. In an analogous art, Chen discloses wherein the information is a digital video broadcasting (see abstract), thereby providing enhanced services. Also, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the apparatus that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and doing a handover by the synchronized first and second digital video broadcasting wireless transmitters (see col. 8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video

broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). Jonsson and Chen do not specifically disclose an elastic buffer in the receiver. In another analogous art, Makinen discloses an elastic buffer in the receiver (see col. 2, line 59 - col. 3, line 14). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Jonsson apparatus for a reliable reception of data even if the timing are not precise. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for the crossing signal before attempting the crossing. Therefore, making the handover

between the burst would bring the predictable result of a reliable reception of data.

Regarding claim 11, Jonsson discloses the apparatus further comprising election module configured for deriving a received signal strength indicator value for said first transmission burst (see col. 10, lines 30-38).

As to claim 16, Jonsson discloses an apparatus/system comprising: a digital broadcast receiver configured to receive digital broadcasting information from a plurality of wireless transmitters, wherein the digital broadcasting receiver is configured to receive at least a first portion of the information as a first transmission burst, said first transmission burst broadcast by a first wireless transmitter; and an election module configured to switch reception from the first wireless transmitter to a second wireless transmitter (see col. 5, line 40 - col. 11, line 42) and switching reception directly to said second wireless transmitter (see fig. 1e). Jonsson does not specifically disclose that the receiver is a digital video broadcasting. In an analogous art, Chen discloses wherein the information is a digital video broadcasting (see abstract), thereby providing enhanced services. Also, Chen discloses: receiving by the mobile station a first video broadcasting signal broadcast by a first wireless transmitter (see col. 6, lines 61-66), if said first signal meets a first predefined criterion (see col. 8, lines 8-13), determining at the apparatus that said data from a second wireless transmitter meets a second predefined criterion (see col. 8, lines 8-43; col. 12, lines 22-41; col. 13, line 46 - col. 14, line 5), the mobile station deriving video broadcasting signal data from a second video broadcasting signal by a second wireless transmitter (see col. 8, lines 28-32) and doing a handover by the synchronized first and second digital video broadcasting wireless transmitters (see col.

8, lines 54-57; col. 7, lines 62-67); thereby allowing the transmission of digital video broadcasting. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add these teaching to the Jonsson method for maintaining the communication service as suggested by Jonsson in col. 1, lines 26-29 and Chen in col. 2, lines 44-47 and enhance the services (see col. 4, lines 35-41). Jonsson and Chen do not specifically disclose an elastic buffer in the receiver. In another analogous art, Makinen discloses an elastic buffer in the receiver (see col. 2, line 59 - col. 3, line 14). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Jonsson apparatus for a reliable reception of data even if the timing are not precise. Although it obvious that the above references switch the reception of the transmitters between burst [packets] because that is how is normally done in GSM and TDMA system, the above reference omits what is well-known to those skilled in the art and already available to the public. In an analogous art, Upton discloses switch the reception of the transmitters between burst [packets, frames] (see col. 7, lines 56-57), the whole purpose of the handover is to permit a mobile user to continue to receive the data. Hard handover are commonly done between bursts [packets] for the simple purpose of maintaining the integrity of the data. One of the ordinary skills in the art would recognize that a handover in the middle of a burst would jeopardize the burst and would wait for the burst to end before attempting the handover. For example, this would be as obvious to one of the ordinary skills in the art as to a pedestrian trying to cross a street; a pedestrian trying to cross a busy street would recognize that crossing the street would jeopardize his safety and would wait for

the crossing signal before attempting the crossing. Therefore, making the handover between the burst would bring the predictable result of a reliable reception of data.

As to claim 18, Jonsson discloses a system wherein said first criterion is met if a receiver signal strength value for said first signal measured by the apparatus is less than a predetermined value (see col. 9, lines 9-20; col. 10, lines 3-55).

As to claims 10 and 19-20, Jonsson discloses an apparatus/system wherein said first and second is met by been greater or smaller than a predetermined value (see col. 10, lines 3-55). Jonsson does not specifically disclose criterion is a bit error rate. Chen discloses were the criterion is a bit error rate and deriving it from the signal (see col. 8, lines 10-14).

As to claim 39, Jonsson discloses wherein the receiver system comprises a mobile terminal (see col. 1, lines 5-8).

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen and Makinen and Upton as applied to claim 16 above, and further in view of Doshi (U.S. Patent 5,936,965).

As to claim 17, Jonsson discloses a transmitter and encapsulating a transmission burst as mentioned above. Doshi discloses a transmitter using more than one protocol (see abstract). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for compatibility purposes.

15. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen US 6731936 B2 and further in view of Malek and Upton as applied to claim 31 above, and further in view of Doshi (U.S. Patent 5,936,965).

As to claim 32, Jonsson discloses a transmitter and encapsulating a transmission burst as mentioned above. Doshi discloses a transmitter using more than one protocol (see abstract). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for compatibility purposes.

16. Claims 40 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen further in view of Makinen and Upton as applied to claims 9 and 16 above, and further in view of Malek.

As to claim 40, the combination of Jonsson discloses the digital broadcasting system everything claimed as explained above except for wherein executing a hand-over from said first transmitter to said at least one other transmitter upon receipt of said transmission burst comprises completing the hand-over prior to a consecutive transmission burst transmitted by the synchronized first and other transmitters. In an analogous art, Malek discloses wherein executing a hand-over from said first transmitter to said at least one other transmitter upon receipt of said transmission burst comprises completing the hand-over prior to a consecutive transmission burst transmitted by the synchronized first and other transmitters (see col. 6, lines 31-35; col. 3, lines 56 67; col. 4, lines 10-14).

As to claim 44, Malek discloses method wherein said step of selecting said second wireless transmitter for receiving the information is performed after receipt of a signal transmission burst from said first wireless transmitter, and prior to receipt of a consecutive signal transmission burst from said second wireless transmitter (see col. 6, lines 31-35).

17. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen and Makinen and Upton as applied to claim 14 above, and further in view of Lim (U.S. Patent US006766168B1).

As to claim 15, the combination of Jonsson discloses everything claimed as explained above except for the apparatus wherein said stream filter comprises an Internet Protocol (IP) filter. In an analogous art, Lim discloses a apparatus wherein said stream filter comprises an Internet Protocol (IP) filter (see col. 4, lines 23-39), thereby allowing the use of the Internet in the mobile device. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings for enhanced features for the user.

18. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson in view of Chen and further in view of Makinem and Upton as applied to claim 9 above, and further in view of TR 101 190 V1.1.1 (1997-12) Digital Video Broadcasting (DVB); Implementation guidelines for DVB terrestrial services; Transmission aspects.

As to claim 47, the combination of Jonsson discloses everything claimed as explained above except for apparatus wherein the digital video broadcasting information is transmitted at a first data transmission rate, and wherein the first transmission burst has a second data transmission rate greater than the first data transmission rate. In an analogous art, TR 101 190 V1.1.1 (1997-12) Digital Video Broadcasting (DVB); Implementation guidelines for DVB terrestrial services; Transmission aspects discloses an apparatus wherein the digital video broadcasting information is transmitted at a first data transmission rate, and wherein the first transmission burst has a second data

transmission rate greater than the first data transmission rate (see section 4 and 4.1, pages 12-13). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine these teachings to simulcast broadcasting of different program with different error protection and coverage areas.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS L. TORRES whose telephone number is (571)272-7926. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-252-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

/Marcos L Torres/

Examiner, Art Unit 2617